



1. One character in this work is forced to sit in the coal-hole as punishment for running away and playing in the mud. Another character dies by accidentally falling into a stone-pit on his way home after inadvertently killing a horse belonging to his brother, Godfrey Cass. In this novel, the reclusive protagonist raises a baby he discovers in his cottage and names Eppie after his precious gold is stolen. For 10 points, name this novel about the title "Weaver of Raveloe" written by George Eliot.

ANSWER: Silas Marner

014-12-70-09101

2. This President's Attorney General Janet Reno ordered the seizure of the Cuban immigrant child Elian Gonzalez. During his presidency, American helicopters were shot down in Mogadishu and FBI agents botched a raid on a cult complex in Waco, Texas. This man served as governor of Arkansas before his presidency, which was marred by perjury allegations and an impeachment after his relations with intern Monica Lewinsky. For 10 points, name this President from 1993 to 2001.

ANSWER: Bill Clinton [or William Jefferson Clinton; or William Jefferson Blythe III]

015-12-70-09102

3. In one essay, this author considered the inadequacy of the suicide of Kirillov in *The Possessed* and theorized that the title character must be happy in recognizing the absurdity of his existence. That essay compares the life of man to rolling a boulder up a hill for eternity. This author of *The Myth of Sisyphus* also wrote a novel in which the killing of an Arab on the beach leads to the execution of Meursault (mur-SOH). For 10 points, name this French existentialist who wrote *The Stranger*.

ANSWER: Albert Camus (al-BAIR kah-MOO)

014-12-70-09103

4. This man won the Nobel Prize in Literature for his biography of his ancestor the Duke of Marlborough and his *A History of the English-Speaking Peoples*. This man praised some pilots in one speech by claiming "Never was so much owed by so many to so few." After succeeding Neville Chamberlain as Prime Minister, he eschewed the appeasement strategy and promised "we shall fight them on the beaches." For 10 points, name this leader of Britain during World War II.

ANSWER: Winston Leonard Spencer Churchill

015-12-70-09104

5. A differential in this property for two different phases gives the partition coefficient. A decrease in this quantity, one measure of which is a substance's K_{sp} value, for ionic compounds can be explained by the common ion effect. Henry's law relates this quantity for a gas to the partial pressure of the gas. All common metal nitrates have this property, but most hydroxides, oxides, and phosphates do not. Usually measured with respect to water as a solvent, for 10 points, name this degree to which a substance can dissolve in another substance.

ANSWER: solubility [accept miscibility]

131-12-70-09105

6. One composition of this type employs two orchestras and a boys' choir and sets poems by Wilfred Owen. That composition, written by Benjamin Britten, is the "War" one. Another composition of this type was completed by Franz Xaver Süssmayr after the premature death of its composer, Wolfgang Amadeus Mozart. Compositions of this type often include such movements as the *Kyrie eleison* and *Dies Irae*. For 10 points, name this type of liturgical composition, a special type of Mass for the dead.

ANSWER: **Requiem** Mass [prompt on **Mass** until mentioned]

014-12-70-09106

7. As this character watches Miss Maudie Atkinson's house burn down, someone she does not see puts a blanket over her. She and her brother exchange gifts with a stranger through a hole in a tree, until it is cemented over. Her friends include the family cook Calpurnia. This sister of Jem has her life saved by Boo Radley after the trial of Tom Robinson. For 10 points, name this daughter of Atticus Finch, the narrator of Harper Lee's novel *To Kill a Mockingbird*.

ANSWER: Jean Louise **Scout** Finch [or **Jean** Louise Finch; prompt on **Finch**]

015-12-70-09107

8. Different types of these proteins are distinguished by unique sequences in their hinge region, and some subtypes of them can fix complement. One isotype of these molecules is a dimer held together by a J chain. They consist of at least two heavy and two light chains connected by disulfide bonds, and they have both a constant and variable regions. These molecules are produced by B cells and attach to antigens, coating them for disposal. For 10 points, name these y-shaped immune proteins

ANSWER: **antibody** or **immunoglobulin**

048-12-70-09108

9. The protagonist of this novel works with Francois and Perrault delivering mail for the Canadian government. Its other characters include Manuel, a gardener who works for Judge Miller. The protagonist of this novel kills a rival named Spitz before being sold to the inexperienced Hal. The death of John Thornton causes the protagonist to kill a bunch of Yeehat Indians and disappear into the woods. For 10 points, name this Jack London novel about the sled dog Buck.

ANSWER: *The **Call of the Wild***

015-12-70-09109

10. In these organisms, two layers of cells are divided by the amoebocyte-containing mesohyl. These animals are divided into the groups Silicea and Calcarea depending on the material of the spicules that make up their skeletal system. "Glass" ones belong to the clade Hexactinellida. These animals excrete water through the osculum and consume food through the use of flagella-beating choanocytes. These suspension feeders take in food particles from the surrounding water. For 10 points, name these organisms belonging to the phylum Porifera.

ANSWER: **sponges** [or **Porifera** before it is read]

080-12-70-09110

11. One character in this play declares "I have given you my soul; leave me my name!" Its characters include the clerk Ezekiel Cheever and the elderly farmer Giles Corey. The protagonist of this play initially does not expose the fraud of Abigail Williams because he does not want the town to know that he cheated on his wife Elizabeth. For 10 points, name this allegory for McCarthyism, an Arthur Miller play in which John Proctor is hanged during the Salem Witch Trials.

ANSWER: *The **Crucible***

015-12-70-09111

12. The equipartition theorem states that the energy of each particle of an ideal gas is equal to three-halves times a constant times this quantity. The square root of three times this quantity times the ideal gas constant divided by a gas's molar mass gives the gas's root-mean-square speed. Charles' law states that this quantity is directly proportional to gas volume at constant pressure. On an absolute scale, this quantity is directly proportional to the average kinetic energy of particles in a gas. For 10 points, name this quantity measured on the Rankine, Celsius, and Fahrenheit scales.

ANSWER: **temperature**

131-12-70-09112

13. This country's second-largest city has endeavored to unclog its pipes by having all residents simultaneously flush their toilets at 7:30. Carl Mauch discovered an 11th-century city here containing a Great Enclosure surrounded by mortar-less 36 foot walls. Its second-largest city is Bulawayo. The Zambezi River forms this country's border with Zambia; it also borders Mozambique to the east and South Africa to the south. For 10 points, name this African country led by Robert Mugabe, which was formerly called Rhodesia.

ANSWER: **Zimbabwe**

080-12-70-09113

14. In its heyday, this language had forms such as the Yevanic dialect used by Jewish speakers. Some newspapers and religious institutions preserve this language today in a modified form called Katharevousa (KAH-thah-ray-VOO-suh) Its dialects are divided into two broad categories of Doric and Attic, the latter of which includes the Koine (COY-nay) form that was used to write the New Testament. For 10 points, identify this ancient tongue that was used in the works of Sophocles and Homer.

ANSWER: Ancient **Greek** [or **Ellinika**]

019-12-70-09114

15. Morley's theorem states that this figure can be constructed from another polygon's angle trisectors. A fractal named for Sierpinski (SEAR-pin-skee) consists of these polygons placed inside one another. The area of this shape can be found using the formula $s^2 \times \frac{\sqrt{3}}{4}$ where s is the side length. All medians are congruent in this figure, as are all altitudes. For 10 points, name this kind of triangle that has three sixty degree interior angles and three congruent sides.

ANSWER: **equilateral triangles** [or **equilateral** triangles after "this kind of triangle" is read; prompt on **triangles**]

131-12-70-09115



1A. What Aztec god was depicted as a feathered serpent?

ANSWER: Quetzalcoatl

1B. What point guard for the Oklahoma City Thunder played at UCLA with Kevin Love?

ANSWER: Russell Westbrook

2A. What force, which is proportional to the square of an object's speed, is caused by a fluid resisting the movement of an object through it?

ANSWER: drag [prompt on air resistance or fluid resistance]

2B. What President served two non-consecutive terms and was the favorite candidate of the Mugwumps during the 1884 election?

ANSWER: Stephen Grover Cleveland

3A. This is a 20-second calculation question. In the equation $x^2 + 9 = 5x + 3$, give all solutions for x .

ANSWER: $x = \underline{3}$ and $x = \underline{2}$

3B. This is a 20-second calculation question. Consider a triangle with two sides of lengths 6 and 8, and a third side of unknown length. What is the maximum possible length of the third side, rounded down to the nearest integer?

ANSWER: 13 units

4A. Name this symbol used to represent the fine structure constant and that denotes an individual in a community with the highest rank, which can be a male.

ANSWER: alpha

4B. What function takes two vectors and returns a scalar proportional to the magnitudes and cosine of the angle between the vectors?

ANSWER: dot product [prompt on partial; do not accept "cross product"]

5A. What biomolecule with a cloverleaf-like secondary structure carries new amino acids to the ribosome during protein synthesis?

ANSWER: tRNA [or transfer RNA]

5B. What property of a star is a measure of light energy emission and is not to be confused with stellar brightness?

ANSWER: luminosity

6A. Wikileaks founder Julian Assange is living in what Rafael Correa-led South American country's London embassy?

ANSWER: Ecuador

6B. Name the first Indian recipient of the Nobel Prize in Literature, whose works include the novel *The Home and the World* and the poetry collection *Gitanjali*.

ANSWER: Rabindranath Tagore [or Rabindranath Thakur]

7A. Saturated fats lack what kind of chemical connection which is present at least once in every alkene?

ANSWER: double bonds

7B. This is a 30-second calculation question. In simplest terms, what is the secant of 30 degree angle?

ANSWER: 2 times root 3 over 3 [or two-thirds root three]

8A. This is a 30-second calculation question. What is the sum of the first seven terms of the Fibonacci sequence?

ANSWER: **33**

8B. An iconic portrait probably depicting Jonathan Buttall titled *The Blue Boy* was executed by what 18th-century English painter?

ANSWER: Thomas **Gainsborough**

9A. Which member of President Barack Obama's cabinet was held in contempt of Congress in June 2012 due to the controversy over Operation Fast and Furious?

ANSWER: Eric Himpton **Holder, Jr.**

9B. Georges Seurat practiced what painting technique that involves forming images from small dots of color?

ANSWER: **pointilism**

10A. What Pulitzer-winning David Mamet play depicts a group of real estate salesmen ruthlessly competing with each other for sales?

ANSWER: **Glengarry Glen Ross**

10B. The self-proclaimed country of Western Sahara lies to the northwest of Mauritania and is currently claimed as the southern half of what other African country?

ANSWER: **Morocco**



1. According to one story, this god trapped Theseus and Pirithous (PEE-rih-THOO-us) in their chairs after offering them a feast. He owns an invisible helmet that was made for him by the Cyclopes. This god split the three realms with his brothers Poseidon and Zeus. In one story, he uses some pomegranate seeds to force Persephone to be with him for part of the year after abducting her from Demeter. For 10 points, name this owner of the three-headed dog Cerberus and Greek god of the underworld.

ANSWER: **Hades** [or **Pluto**]

015-12-70-09117

2. Before it was switched to Mecca, Muslims prayed in the direction of this city, the site of the al-Aqsa mosque. In the Quran, Muhammad ascends to heaven from this city after riding the horse Buraq here, an event called the Night Journey. The site of Muhammad's ascension is thought to be marked by the Dome of the Rock here. Other religious sites in this city include the Via Dolorosa, the Wailing Wall, and the Church of the Holy Sepulchre. For 10 points, name this Israeli city.

ANSWER: **Jerusalem**

015-12-70-09118

3. One citizen of this city had his head thrown into his brother's camp after losing the Battle of the Metaurus River. That man was Hasdrubal, who along with Mago, Hanno, and Hamilcar was a member of this city's Barca family. This city's forces lost the Battle of Zama to Scipio Africanus, who salted its land so that nothing could grow according to a popular legend. For 10 points, name this North African city led by Hannibal, which fought several Punic Wars against Rome.

ANSWER: **Carthage** [or **Carthago**; or **Kart-hadasht**]

015-12-70-09119

4. In his first appearance, he can be defeated by being hit with five fireballs. He is commonly attributed with children including Wendy and Lemmy. In one appearance, he engages in a rivalry over who's stronger with O'Chunks. A DS game featuring his two main foes is entitled as his *Inside Story*. In his most recent Wii appearance, he is defeated while trying to use his Galaxy Generator and kidnapping Princess Peach. For 10 points, name this Nintendo villain, often cast opposite Mario.

ANSWER: **Bowser** [or **King Koopa**]

088-12-70-09120

5. In his final speech, this character asks, "Pray you, undo this button." In another scene, he commands the "all-shaking thunder" to "smite flat the thick rotundity o' the world." This character states that "nothing will come of nothing" when his favorite daughter refuses to participate in a public love test. Accompanied into a storm by his fool, this character fails to save Cordelia from execution. For 10 points, name this British king, the title character of a Shakespearean tragedy.

ANSWER: King **Lear**

014-12-70-09121

6. One story relates that this man was banished after throwing his nephew Perdix off a cliff. He built a wooden cow for Pasiphae (PAH-si-fay) so that she could sleep with a bull without dying. Faced with trying to imprison the Minotaur, King Minos tasked this man with building the labyrinth. After this man was imprisoned, he escaped by designing wings from wax and feathers, although his son Icarus died when he flew too close to the sun. For 10 points, name this inventor from Greek mythology.

ANSWER: **Daedalus**

015-12-70-09122

7. After being defeated by the llaneros (yah-NAIR-ohs) of Jose Tomas Boves, this man fled to Jamaica and wrote a letter proposing a government modeled on that of Britain. This man theorized about the fall of the First Republic in the Cartagena (CART-uh-HAY-nuh) Manifesto. This man won the Battles of Carabobo and Boyaca. For 10 points, name this president of Gran Colombia who liberated Venezuela and several other South American countries from Spanish rule.

ANSWER: Simon **Bolivar**

014-12-70-09123

8. This poet concluded, “Our tree yet crowns the hill, our Scholar travels yet the loved hill-side” in a pastoral elegy written for his friend Arthur Hugh Clough. This poet of “Thyrsis” also wrote of an “eternal note of sadness” heard long ago by Sophocles (SAHF-uh-klees) in a poem in which the speaker exclaims, “Ah, love, let us be true to one another!” For 10 points, name this Victorian poet who described a “darkling plain...where ignorant armies clash by night” in his poem “Dover Beach.”

ANSWER: Matthew **Arnold**

014-12-70-09124

9. John Ingram was unable to sustain this rebellion after its leader died of dysentery. This rebellion was opposed by the colonial governor William Berkeley, who was unable to prevent it from burning Jamestown. This rebellion was sparked by frontier Indian violence that went unaddressed by the colonial government. For 10 points, name this 1676 rebellion in Virginia that was led by a namesake planter.

ANSWER: **Bacon's** Rebellion

015-12-70-09125

10. This work reuses material from its composer’s opera *Undina* in its second act, and this work is most often performed in the 1895 version of Marius Petipa and Lev Ivanov. This work includes a “Dance with Goblets” near the end of its first act. Characters in this ballet include the crossbow-wielding Prince Siegfried and the evil wizard Von Rothbart. For 10 points, name this Tchaikovsky ballet in which Odette is transformed into the title creature.

ANSWER: **Swan Lake** [or **Lebedinoye Ozero**]

014-12-70-09126

11. A city on this river in Scioto County, Portsmouth, has a 77 foot floodwall built in response to this river’s 1937 flooding of that city. The city of Huntington is located at the confluence of this river and the Guyandotte, and the world’s oldest suspension bridge crosses this river in Wheeling. This river joins the Mississippi River in Cairo, Illinois, and Louisville is located on this river. For 10 points, name this river that forms the boundary between its namesake state and West Virginia and Kentucky.

ANSWER: **Ohio** River

030-12-70-09127

12. The last episode of every season of this show opens as the song "Carry on Wayward Son" plays over a recap of the season's events. In a running gag on this show, the protagonists use names of rock stars like Lars Ulrich, Ted Nugent, and John Bonham on their fake FBI badges. On this show, the protagonists kill Lilith, accidentally freeing the devil, whom they must seal away along with the Archangel Michael. For 10 points, name this CW show that stars Jared Padalecki and Jensen Ackles as the monster-hunting brothers Sam and Dean Winchester.

ANSWER: *Supernatural*

080-12-70-09128

13. Underwater examples of these structures include guyots (GEE-ohs). Biomes associated with these structures parallel what one would expect from increasing latitude. These structures cause air to condensate and precipitate, thus forming a "rain shadow" on their lee side. These structures are formed in orogenies, which can happen when two plates collide. For 10 points, name these landforms that stretch above the surrounding area and whose largest example on Earth is Everest.

ANSWER: mountain ranges

066-12-70-09129

14. In one novel by this writer, a man contemplates killing his father with a pestle in the belief that his lover Grushenka has accepted his father's bribe to sleep with him. Another character created by this writer deliriously condemns the proposed strategic marriage between his sister Dunya and Pyotr Petrovich Luzhin. That character, a poor student, murders the pawnbroker Alyona Ivanovna and subsequently has a breakdown. For 10 points, name this Russian novelist of *The Brothers Karamazov* who created Raskolnikov (rahs-KOL-nih-koff) in *Crime and Punishment*.

ANSWER: Fyodor Dostoevsky [or Fyodor Mikhailovich Dostoevsky]

014-12-70-09130

15. This thinker explained how interest rates are determined using his concept of liquidity preference. This thinker criticized the massive reparations exacted from Germany in the Treaty of Versailles in his *The Economic Consequences of the Peace*. He argued for the necessity of increasing aggregate demand in a book which influenced American policies adopted during the Great Depression. For 10 points, name this British economist who advocated deficit spending in *The General Theory of Employment, Interest, and Money*.

ANSWER: John Maynard Keynes

014-12-70-09131



1. In the ocean, a minimum for this quantity occurs in a layer known as the SOFAR channel. This value is equal to the square root of the bulk modulus divided by the density. Dividing the velocity of an object by this value gives the Mach number, and surpassing this value causes a sonic boom. For 10 points, name this value which in air is approximately 340 meters per second, the velocity at which acoustic waves travel through a medium.

ANSWER: speed of sound [accept obvious equivalents]

048-12-70-09132

2. Albert Einstein wrote a 1939 letter to Franklin Roosevelt stressing the necessity of this program. The main production base for this program was in Oak Ridge, Tennessee. Much of its testing took place at White Sands because of the proximity to Los Alamos. This project was led by Robert Oppenheimer, and it led to the Enola Gay dropping "Little Boy" on Hiroshima. For 10 points, name this American effort to develop the atomic bomb that was named for a New York borough.

ANSWER: Manhattan Project

015-12-70-09133

3. The tcsh shell is named after this language due to its similar syntax. Dynamic memory allocation is done in this language with the use of malloc. This language's "string" is commonly used to denote a string that is null-terminated. The authoritative book on this language, often abbreviated K&R, was written by Brian Kernighan and this language's developer, Dennis Ritchie, who created it while at Bell Labs. For 10 points, identify this most widely-used and influential programming language.

ANSWER: C

066-12-70-09134

4. This modern-day country engaged in an independence war against Spain called the Eighty Years' War. It was led by a line of stadtholders from the House of Orange, which was founded by William the Silent. The South African Boers were descended from settlers from this country, which also colonized Suriname and Indonesia. Anne Frank hid for two years in a house in this country. For 10 points, name this country that has used dikes to protect its cities of Rotterdam and Amsterdam.

ANSWER: Kingdom of the Netherlands [or Koninkrijk der Nederlanden]

015-12-70-09135

5. This poem describes "More happy love! more happy, happy love...forever panting, and forever young." In a later stanza, the speaker tells the addressee, "When old age shall this generation waste, thou shalt remain...a friend to man." That addressee of this poem is a "foster-child of silence and slow time" and a "still unravished bride of quietness" which declares, "Beauty is truth, truth beauty." For 10 points, name this ode by John Keats addressing a certain work of art.

ANSWER: "Ode on a Grecian Urn"

014-12-70-09136

This is a calculation question. If $\sin^2 x = .64$, what is the cosine of x?

ANSWER: .6 [or 3/5]

In what 1776 book did Adam Smith propose an "invisible hand" which guides the free market?

ANSWER: *The* Wealth of Nations [or *An Inquiry into the Nature and Causes of the* Wealth of Nations]